ABSTRACT

A hydraulic system 10 of the present invention has a hydraulic pump driven by a driving source 14, a hydraulic pump motor 52 driven by an operating oil discharged from the hydraulic pump and flowing in an oil path 50, an inertial body 60 connected to a rotary shaft of the hydraulic pump motor, an oil path 62 connected between an outlet port of the hydraulic pump motor and a load 22, an unloading oil path 64 branched from the oil path 62, and an on-off valve 68 inserted in the unloading oil path. In this configuration, as the on-off valve is opened and closed, a high pressure is generated in the oil path 62 by making use of kinetic energy of the inertial body. The inertial body is driven by hydraulic power and the inertial body is separated from the driving source, which also provides an effect of increasing degrees of freedom for an instrument layout.